The building of a professional: Creating greater career identity within a degree

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The Building of a Professional: Creating Greater Career Identity within a Degree

Brett Freudenberg, Mark Brimble and Craig Cameron
The Building of a Professional: Creating Greater Career Identity within a Degree

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Abstract: The skills required by a student to excel both academically and in their chosen professional careers have been identified by many institutions, and can be referred to as ‘generic capabilities’. These generic capabilities can extend from interpersonal skills, problem solving, oral communication and career skills. In recent years concerns have been raised about a gap emerging between graduate attributes developed in university degrees and what industry requires (Yap, 1997; Albrecht and Sack, 2000; Kavanagh and Drennen, 2008). This is often referred to as a lack of ‘employment readiness’ of students and the need to engage industry with students and the curriculum. Such a concern was highlighted in the 2007 report titled ‘Graduate Employability Skills’ prepared for the Business, Industry and Higher Education Collaboration Council. One of the generic skills of concern is career skills, which relates to knowledge of the relevant profession, the ability to interact with the profession and seek a career. To address this concern a Professional Development Program (the PDP) was developed. The PDP is integrated into a Business Degree and is designed to systematically develop students’ learning, employment and generic skills and supplements their theoretical studies. It is argued that this integration of the PDP permeating throughout the Degree enhances students’ generic capabilities, including their career skills. This paper details the procedures that have been developed, and provides preliminary evidence that the PDP has, from the perspective of students, made a substantial contribution to the building of a ‘professional’. In particular, we argue that integrating professional skills and awareness systematically into an undergraduate degree in partnership with industry has developed students’ generic capabilities, improved their employment readiness and provided students with a greater understanding of their future profession.

Keywords: Generic Capabilities, Work Integrated Learning, Professional Skills, Academic Skills

Introduction

Do students fully appreciate the dynamics of their chosen profession? This is an important question for today’s students who enjoy greater career choice and who may be the first in their family seeking to enter a vocation. Dewey stated that there is nothing worse than being forced by circumstances into an ‘uncongenial calling’ (Dewey 1916: 235). Without an appreciation of the profession they are about to enter, students may commence a career ill-suited to them.

Government, industry associations and employers are concerned about the work-readiness of graduates, in particular their lack of ‘employability’, ‘graduate’ or ‘generic’ skills (AC Nielson, 2000; Precision Consultancy, 2007). Recently, employers in Australia indicated that accounting graduates rarely had much business awareness or real life experience, which is highly valued (Kavanagh and Drennen, 2008: 294). Students and employers also reported
that many of the ‘essential’ non-technical and professional skills and attributes were not being developed sufficiently in university accounting programmes (Kavanagh and Drennen, 2008: 279).

One technique that can assist in improving students’ development of professional skills and understanding is work integrated learning (WIL). WIL is seen as meeting the demands of both employers and students for employable knowledge and skills (Patrick et al., 2009: v). To this end, the Professional Development Program (the PDP) was established to, in part, improve students understanding of what it is to be a professional in the fields of accounting and financial planning, and to assist in building their professional identity.

This paper reports the findings of the first year of the PDP in terms of students’ professional identity, professional skills and confidence with the profession that they will enter. We find that this integrated WIL model has made a substantial contribution to the building of a ‘professional’ by improving the professional identity of students and their awareness of the skills needed to be a professional and therefore reduce the risk of students falling into an ‘uncongenial calling’.

**Theoretical Background**

We now present a brief review of the literature that demonstrates a gap between students and employers’ expectations, followed by a discussion of how WIL can assist in addressing this gap.

**Expectation Gap**

An important determinant of graduate success in the workplace has been described as ‘graduate attributes’ rather than their specific degree (Harvey, 1999). Graduate skills demanded by employers include being confident communicators, team players, critical thinkers, problem solvers and having initiative (Harvey et al., 1997).

One of the graduate skills required can be described as ‘professional and career knowledge’. A recent study by Kavanagh and Drennen (2008) examined the perceptions of accounting employers and students of the importance of various graduate skills and attributes. They found that while employers still expect a base level of technical skills, they require ‘business awareness’ and an understanding of the ‘real world’. In fact, these two items were ranked second of the top three skills that employers are expecting accounting graduates entering the profession to have (Kavanagh and Drennen, 2008: 295-296). However, students did not rank ‘business awareness’ at all and appeared to be unaware or misunderstood employers’ expectations in regard to this attribute (Kavanagh and Drennen, 2008: 294). Accordingly, there exists a ‘gap’ between student and employer expectations. Kavanagh and Drennen conclude that both employers and students believe that tertiary programs in accounting are failing to sufficiently develop the non-technical and professional skills of students.¹

Universities have found it a challenge to meet student career needs, including the acquisition of workplace knowledge and skills, graduate attributes, and also the skills needed for career planning and career decision making (Atchison et al., 2002: 3). It has been emphasised

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¹ Other industry reports that have reiterated a similar theme include Business/Higher Education Round Table, 1991, 1992, 1993; Association of Graduate Recruiters, 1993, 1995; Sausman & Steel, 1997; Coopers & Lybrand, 1998; AC Nielsen Research Services, 2000.
that these skills need to be ‘embedded’ into the curriculum through ‘constructed learning experiences’ rather than being ‘accidental’ (Australian Joint Accounting Bodies, 2008). The two key issues that flow from the literature relate to how professional and business awareness is developed and how these are integrated into curricula. WIL has emerged as a viable mechanism to address these two key issues.

**Work Integrated Learning**

WIL is typically described as ‘educational programs which combine and integrate learning and its workplace application, regardless of whether this integration occurs in industry or whether it is real or simulated’ (Atchison et al., 2002: 3). WIL research has revealed positive effects on student learning, including development of professional and personal skills (Day et al., 1982; Harvey et al., 1998; Knight, 2007), and importantly, improved attitudes and behaviours towards work readiness (Hughes and Moore, 1999). An appreciation of professional knowledge through WIL activities has provided students with career direction and an understanding of what skills are relevant for future career success (Patrick et al., 2009). This suggests that WIL may help address concerns of graduate employment knowledge and business awareness. The involvement and support of industry with the delivery of WIL programs is ideal. Industry participation and interaction provides students in a WIL program with more realistic expectations of career potential compared to students who did not participate in WIL (Dubick et al., 1996). Furthermore, the use of professionals and industry representatives can enhance students’ confidence and their self-belief (Subramaniam and Freudenberg, 2007).

With these findings in mind, the PDP was developed with some WIL opportunities (involving industry) to improve students’ professional awareness and professional identity.

**The Professional Development Program**

The PDP is integrated into a business degree and is designed for the systematic development of students’ learning, employment and generic skills while providing students with industry knowledge, professional skills and exposure to partner firms. The PDP is delivered in the days prior to the start of each trimester (known respectively as PD#1, PD#2 and PD#3), analogous to a continuing orientation program that all students in the Professional Degree (commencing and continuing) participate in. The PDP is structured to deliver key skills and knowledge to students depending upon their progression (1st, 2nd or 3rd year) and provide opportunities for mentoring and socialising through a Pod system.

The PDP supports the Professional Degree and is designed to ensure that students are adequately equipped for the WIL experience represented by the internship that they will

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2 There are a number of terminologies used to describe WIL, including cooperative learning and service learning, however the term WIL is used in this paper for consistency.

3 The Professional Degree involves students studying full time for their first year, and then converting to part time study for their second and third years while undertaking a two-year paid internship in either an accounting or financial planning firm.

4 Pods are multi year student mentoring groups. Each group contains a variety of students across year levels, an academic member and at least two industry members. Pods meet regularly for both structured and unstructured activities.
undertake in the 2nd and 3rd year of their degree. A critical element to the success of the PDP is the involvement of industry with the design and delivery of certain sessions within it, thereby giving the PDP WIL characteristics. A number of the activities are either facilitated by industry representatives (practitioners, recruitment/human resource staff, recent graduates) or professional bodies. Other sessions are conducted by university staff (academic and non-academic) or consultants. Each instalment of the PDP contains a highlight event to showcase to industry the University and its students, such as a networking breakfast (PD#1), speed dating interviews (PD#2) and a Student-Industry Conference (PD#3). It is argued that the PDP leads to enhanced graduate attributes in terms of professional identity and their career and vocational skills.

**Research Method**

This study employs a longitudinal survey methodology to examine the impact of the PDP on first year students (the PD Students). The instrument was administered at the start of the university year in PD#1 in an attempt to capture students prior to engaging extensively with the university. The instrument was readministered 12 months later at the start of the students’ second year to gauge the level of student development. In addition, a control group of students in a similar degree that does not include the PDP were surveyed at similar times as the primary sample (non-PD students).

This data is employed to examine two primary research questions that guide this paper. Firstly, does participation in the PDP increase students’ identity with their chosen profession? Secondly, does the PDP improve students’ confidence and skills in dealing with their chosen profession?

**Survey Instrument**

The survey instrument developed included four sections. The first contained standard demographic questions, with remaining sections containing questions about the students’ satisfaction, perceptions of self-efficacy and generic skills. Of the questions contained in the survey, those relevant to professional identity and business knowledge and skills were extracted to build two measures to proxy for:

- Professional Identity – measuring the extent to which the student developed their professional identity; and
- Professional confidence and skills – measuring the students’ confidence and ability to (a) interact with the profession; and (b) seek a career in the profession.

Responses were in the form of a seven point scale from unacceptable (1) to excellent (7) for the satisfaction measures, while self-efficacy was measured on a five point scale from 1 (not confident at all) to 5 (very confident), adjusted to a seven point scale to allow for comparison with other measures (achieved by averaging). To determine generic capabilities, students were provided with a self assessment tool to evaluate their level of skill development.\(^5\) Respondents self evaluated each of the statements within the generic capabilities on a seven point scale, from (1) ‘not at all a characteristic of me’ to (7) ‘very characteristic of me’.

\(^5\) The inventory tool was based on the one developed by Lizzio and Wilson (2004: 115).
**Descriptive Statistics**

A total of 170 useable student surveys resulted from this process (it was not mandatory for students to participate). Of these, 67 were from the PD Students in first year and 34 in the second year. For the non-PD students there were 27 and 42 respondents in the first and second year surveys respectively. Summary descriptive statistics for the samples are provided in Table 1. We contend that the descriptives are typical of an undergraduate cohort for the concerned institution with the male/female division oscillating between 40 and 60%, and age predominantly in the 30 and under category. Entrance scores for the sampled students range between 9 and 11 which again are typical for the relevant programs. Some divergence in the groups occurs in the student type category with approximately 93% of the PD Students being domestic students, with approximately 7% being international. For the non-PD students there is a larger representation of international students: first year: 26%, and second year 64%. This is typical of the Degrees involved (one being on a smaller campus); however we contend that this should not have a significant impact on our results in terms of students’ perceptions of generic skills, satisfaction and self-efficacy. The increase in second year international non-PD students is due to a significant number of pathway students that transfer into the second year of the degree. While this may have some impact on our results, we suggest that this is mitigated given that a majority of these students have completed a program that is moderated by the relevant institution and includes a specific course on generic skills (and hence their experience should mirror that of the degree proper).

**Table 1: Descriptive Statistics**

<table>
<thead>
<tr>
<th>Item</th>
<th>PD Students</th>
<th>Non-PD Students (Control Group)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>67</td>
<td>34</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>27</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>62</td>
<td>32</td>
</tr>
<tr>
<td>International</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20</td>
<td>42</td>
<td>63</td>
</tr>
<tr>
<td>20-30</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>30-40</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>&gt;40</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Entrance Score</td>
<td>10.2</td>
<td>8.9</td>
</tr>
</tbody>
</table>

BRETT FREUDENBERG, MARK BRIMBLE, CRAIG CAMERON
Results and Discussion

Summary results are presented in Table 2. In terms of the student professional satisfaction, confidence and skill items (Panel A) of the entire sample, the average score across the 31 measures is 5.61 out of seven (column 3). This appears to be a strong result; however there is a degree of variance across the measures with a range of 4.22 to 6.34. The lowest was ‘satisfaction with contact with industry relevant to my degree’, which suggests that this is both important and of concern to students and sets a strong premise upon which to develop WIL initiatives. Interestingly the weaker items tend to be in the confidence and satisfaction WIL measures rather than the skills items, indicating the perception of students that they are less prepared for employment related issues than they are concerned about the more traditional academic skills.

In terms of the PD students at the start of their first year, their overall average score is as per the pooled average of 5.61 (column 4) and the four weaker areas are similar to the pooled results. Interestingly, they tend to be less confident than the overall sample and slightly stronger than the average in the skills areas (for example 4.15 vs 4.51 in ‘confidence in progressing through the ranks’ and 6.49 vs 6.30 ‘interested in developing oral presentation skills’). The latter is true for all the skills sets for this group in terms of both the awareness of their importance and an even higher interest in developing them.
<table>
<thead>
<tr>
<th>Category</th>
<th>Measure</th>
<th>Pooled</th>
<th>PD 08</th>
<th>Non-PD 08</th>
<th>PD 09</th>
<th>Non-PD 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Contact with Industry relevant to my Degree</td>
<td>4.22</td>
<td>4.12†</td>
<td>3.00</td>
<td>5.91***</td>
<td>4.04***</td>
</tr>
<tr>
<td></td>
<td>Relevance of my Degree to my Professional needs</td>
<td>5.43</td>
<td>5.43</td>
<td>4.92</td>
<td>6.26**</td>
<td>5.22***</td>
</tr>
<tr>
<td>Confidence</td>
<td>progress through the ranks in a new place of employment.</td>
<td>4.51</td>
<td>4.15‡</td>
<td>5.15**</td>
<td>4.94**</td>
<td>4.45*</td>
</tr>
<tr>
<td></td>
<td>achieve most career goals that you have been able to set for yourself.</td>
<td>4.84</td>
<td>4.54‡</td>
<td>3.73**</td>
<td>5.29**</td>
<td>4.75*</td>
</tr>
<tr>
<td></td>
<td>begin a career in the Degree that you are studying</td>
<td>5.20</td>
<td>5.00##</td>
<td>5.78***</td>
<td>5.89**</td>
<td>4.88*</td>
</tr>
<tr>
<td></td>
<td>network with Industry members of the profession that you are studying.</td>
<td>4.49</td>
<td>3.78###</td>
<td>5.19†</td>
<td>5.37###</td>
<td>4.63*</td>
</tr>
<tr>
<td></td>
<td>be more effective in job interviews for your Profession.</td>
<td>4.53</td>
<td>4.04##</td>
<td>5.00</td>
<td>5.34###</td>
<td>4.57***</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.02</td>
<td>6.13</td>
<td>6.04†</td>
<td>6.37</td>
<td>5.71***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.12</td>
<td>6.46</td>
<td>6.22##</td>
<td>6.37</td>
<td>5.51***</td>
</tr>
<tr>
<td>Self Management Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.27</td>
<td>6.40</td>
<td>6.41**</td>
<td>6.56</td>
<td>5.90***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.21</td>
<td>6.48</td>
<td>6.44**</td>
<td>6.26</td>
<td>5.76***</td>
</tr>
<tr>
<td>Learning and Adaptable Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.10</td>
<td>6.34</td>
<td>6.15†</td>
<td>6.34</td>
<td>5.67***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.09</td>
<td>6.42</td>
<td>6.33##</td>
<td>6.23</td>
<td>5.53***</td>
</tr>
<tr>
<td>Problem Solving Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.22</td>
<td>6.38</td>
<td>6.52***</td>
<td>6.46</td>
<td>5.71***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.21</td>
<td>6.48</td>
<td>6.56</td>
<td>6.43</td>
<td>5.55***</td>
</tr>
<tr>
<td>Concept and Analysis</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>5.96</td>
<td>6.06</td>
<td>6.11**</td>
<td>6.17</td>
<td>5.66***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>5.90</td>
<td>6.26</td>
<td>6.07##</td>
<td>5.86</td>
<td>5.42***</td>
</tr>
<tr>
<td>Oral Communication Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.34</td>
<td>6.38</td>
<td>6.56##</td>
<td>6.71*</td>
<td>5.94***</td>
</tr>
<tr>
<td>Team Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.30</td>
<td>6.49</td>
<td>6.59***</td>
<td>6.63</td>
<td>5.69***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.20</td>
<td>6.33</td>
<td>6.33**</td>
<td>6.59</td>
<td>5.76***</td>
</tr>
<tr>
<td>Information Literacy Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.14</td>
<td>6.42</td>
<td>6.22*</td>
<td>6.24</td>
<td>5.71**</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.07</td>
<td>6.29</td>
<td>6.19*</td>
<td>6.14</td>
<td>5.71**</td>
</tr>
<tr>
<td>Written Communication Skills</td>
<td>How relevant do you consider ..... will be to your future work or career</td>
<td>6.19</td>
<td>6.52</td>
<td>6.26**</td>
<td>6.29</td>
<td>5.71**</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.23</td>
<td>6.37</td>
<td>6.30*</td>
<td>6.66##</td>
<td>5.73***</td>
</tr>
<tr>
<td></td>
<td>How interested are you in developing your .....</td>
<td>6.26</td>
<td>6.52</td>
<td>6.33**</td>
<td>6.63</td>
<td>5.65***</td>
</tr>
</tbody>
</table>
### Panel A: Professional Satisfaction, Confidence and Skills (continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>Measure</th>
<th>Pooled</th>
<th>PD 08</th>
<th>Non-PD 08</th>
<th>PD 09</th>
<th>Non-PD 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career and vocational skills</td>
<td>I understand the requirements of the various types of selection methods</td>
<td>5.05</td>
<td>4.55***</td>
<td>5.52</td>
<td>5.54***</td>
<td>5.18</td>
</tr>
<tr>
<td></td>
<td>(e.g., interviews, assessment centres, work tests)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I know how to develop and structure my resume and letter of application</td>
<td>4.95</td>
<td>4.61</td>
<td>5.11</td>
<td>5.66***</td>
<td>4.86***</td>
</tr>
<tr>
<td></td>
<td>to make a positive impression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have a strategy for researching positions or organisations in which I</td>
<td>4.73</td>
<td>4.41*</td>
<td>5.07</td>
<td>5.26**</td>
<td>4.63**</td>
</tr>
<tr>
<td></td>
<td>am interested</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am able to project a confident and professional image of myself in an</td>
<td>5.19</td>
<td>5.12</td>
<td>5.44**</td>
<td>5.71***</td>
<td>4.84***</td>
</tr>
<tr>
<td></td>
<td>interview situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am confident relating and presenting my background and experience in a</td>
<td>5.04</td>
<td>4.86</td>
<td>5.30*</td>
<td>5.57**</td>
<td>4.78***</td>
</tr>
<tr>
<td></td>
<td>way that matches the requirements of a particular employer or position</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have a strategy for learning from unsuccessful applications (e.g.,</td>
<td>4.76</td>
<td>4.65</td>
<td>4.56</td>
<td>5.17*</td>
<td>4.78</td>
</tr>
<tr>
<td></td>
<td>asking for feedback, self assessment) so as to make a better impression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>next time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average (PS)</td>
<td></td>
<td>5.61</td>
<td>5.61</td>
<td>5.78</td>
<td>6.03</td>
<td>5.29</td>
</tr>
</tbody>
</table>
In comparison to the pooled results, the non-PD students in their first year have a higher average score (5.78) and the overall pattern of weaker scores in the WIL related areas than

<table>
<thead>
<tr>
<th>Category</th>
<th>Measure 1</th>
<th>Pool 3</th>
<th>PD 08</th>
<th>Non-PD 08</th>
<th>PD 09</th>
<th>Non-PD 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>The industry that I will enter once I graduate</td>
<td>4.83</td>
<td>4.86</td>
<td>4.12</td>
<td>6.24</td>
<td>4.38</td>
</tr>
<tr>
<td>Confidence</td>
<td>know what is expected of you as a worker</td>
<td>5.16</td>
<td>4.87</td>
<td>5.48</td>
<td>5.23</td>
<td>5.41</td>
</tr>
<tr>
<td></td>
<td>know how things ‘really work’ inside an organisation</td>
<td>4.52</td>
<td>4.04</td>
<td>5.22</td>
<td>4.54</td>
<td>4.80</td>
</tr>
<tr>
<td>Career and vocational skills</td>
<td>I have a clear sense of the specific type of work I would like to do in the future</td>
<td>5.46</td>
<td>5.41</td>
<td>5.19</td>
<td>6.14</td>
<td>5.29</td>
</tr>
<tr>
<td></td>
<td>The career decisions I have made to date are based on my own preferences rather than satisfying other people’s expectations of me</td>
<td>5.58</td>
<td>5.41</td>
<td>5.59</td>
<td>6.29</td>
<td>5.45</td>
</tr>
<tr>
<td></td>
<td>I can explicitly and accurately describe my interests, values, and abilities and the type of “contribution” I would like to make</td>
<td>5.33</td>
<td>5.25</td>
<td>5.33</td>
<td>5.86</td>
<td>5.16</td>
</tr>
<tr>
<td>Average (PI)</td>
<td></td>
<td>5.15</td>
<td>4.97</td>
<td>5.16</td>
<td>5.72</td>
<td>5.08</td>
</tr>
</tbody>
</table>

The notations in columns 4 to 7 present summary results of t-tests (statistical significance) on the respondent averages in the noted columns where ‘*’ denotes statistical significance at the 10% level, ‘**’ denotes significance at the 5% level and ‘***’ denotes significance at the 1% level. The “#” are as per the “*”, but with a negative sign. The tests are structured as follows. Column 4 notations test column 4 versus column 5. The notation ‘***’ therefore indicates that the mean of professional students data is statistically significantly greater than that of the non-professional students (at the 5% level). Column 5 notations test column 5 versus column 7, column 6 notations test column 4 versus column 6 and column 7 notations tests column 6 versus column 7.
the skills based areas. The non-PD students are less satisfied with their degree in terms of industry involvement and professional relevance, however are more confident than the PD students in terms of their ability to obtain professional employment. Having established this as a starting point we can now assess the impact of the PDP on the student cohort after one year.

At the beginning of the second year (column 6), the PD student results appear to have improved with the overall average moving from 5.61 to 6.03 (the highest of the five groups). Contributing items to the increase are the satisfaction and confidence measures, all of which are statistically higher in the second year compared with the first year. This is also the case for the career and vocational skills measures. The other skills measures are largely the same (and still relatively high scoring) with only three statistically significant movements. In terms of the largest increases, some significant improvements in several items are observed including ‘satisfaction with contact with industry’ (4.12 to 5.91), ‘confidence with networking with industry members’ (3.78 to 5.37), ‘understanding of selection methods’ (4.55 to 5.54) and ‘know how to develop and structure my resume and covering letter’ (4.61 to 5.66). We note that these items are issues that are directly addressed in sessions during the PDP in the first year, which suggests that these PD sessions have had a positive impact on the student cohort.

Overall, we contend that the PDP has had a positive impact on PD students when their results are considered both in isolation and when compared with the non-PD students.

The non-PD students results at the start of their second year (column 7) show a decline reported in the average (5.78 to 5.29) and a statistically significant decline in 23 of the measures (see the notations in column 5). The contributors to this decline appear to be both the confidence measures and the skills measures (both relevance and interest in development) many of which have declined. This suggests there was an element of over confidence at the commencement of their first year in both their understanding of the process of progression to a professional career and their ability to achieve this. What is more concerning however is the decline in both the perception of the relevance of and interest in developing generic skills, perhaps indicating a disconnect between their studies and their professional awareness and confidence. Interestingly the two satisfaction measures have both improved (although not statistically significantly), suggesting the students were somewhat too pessimistic about this at the start of their degrees.

In terms of the impact of the PDP in the first 12 months, the notations in column 7 compare the PD with the non-PD students at the start of their second year. In all but two of the measures the PD students report higher scores, suggesting they have greater satisfaction, confidence and career skills than the non-PD students, as well as greater awareness of the relevance of generic skills and a greater desire to develop these further. This reverses the results of confidence from the first year data and shows improvement in other areas for the PD students, where the non-PD students’ scores have declined. Overall, we conclude that this presents compelling evidence to support the argument that WIL programs improve students’ confidence and skills in dealing with their chosen profession and as such answers our second research question in the affirmative.

In terms of our first research question in relation to professional identity, Panel B of Table 2 presents summary results which indicate that the PDP has made a positive contribution. The pooled data (column 3) shows an average score of 5.15 which is a relatively robust score, however perhaps not as robust as one might expect given the significant undertaking that commencing a degree represents and the commitment that it should entail. The PD stu-
dents at the start of their degree (column 4) score below the average at 4.97 and are once again lower on the confidence measures. In comparison the non-PD students at the commencement of their first year score around the pooled average at 5.16, are statistically significantly higher in the confidence measures, but are weaker on the satisfaction measure on the industry they will enter.

The data from the start of the students’ second year once again shows some substantial changes for the PD students over their 12 months with statistically significant increases in the satisfaction and career skills measures. Their confidence measures also improved, but not significantly. In comparison the non-PD students exhibit no statistically significant changes from the first year to their second year. Comparing the two groups at the commencement of their second year, the PD students’ results are stronger in all but one measure. This is the ‘knowing what is expected of you as a worker’ measure in which the non-PD students are statistically significantly stronger than the PD students. The other confidence measure, while not statistically significantly different, shows an increase (decrease) by the PD (non-PD) students. The satisfaction and career skills measures all favour the PD students. What is particularly interesting is the strong result (and improvement from the first year data) for the measures ‘satisfaction with the industry I will enter once I graduate’ (4.86 to 6.24) and ‘the career decisions I have made to date are based on my own preferences rather than satisfying other people’s expectations of me’ (5.41 to 6.29) which demonstrates that the PDP assists in mitigating the possibility of students entering an ‘uncongenial calling’. This, together with the broader tenor of the results, suggests that WIL integrated programs can have a positive impact on students’ professional identity. Furthermore, we note that the results appear to accord with the reviewed literature that WIL programs improve students’ understanding of the skills required to be successful in their chosen profession, and their confidence and self efficacy. In summary, we conclude with an affirmative response to our first research question in relation to whether participation in the PDP increases students’ identity with their chosen profession.

Qualitative evidence also received from PD students, an assessment of which is beyond the scope of this paper, supports the impact of integrated WIL activities on their professional skills, professional identity and understanding of their chosen profession.

**Limitations and Further Research**

The findings of this study should be viewed in light of several limitations including the preliminary nature of the evidence, its case study nature in terms of its external validity and the short-time frame of the analysis. More objective measures could be employed including behavioural skills tests, observations and open-ended interviews. Further, it would be beneficial to research industry participants in the PDP to ascertain their impression as to the professional identity of the PD students compared to non-PD students who do not undertake a similar program. The issues raised in this paper provide further research opportunities including examining the impact of such programmes with a larger student cohort in different disciplines and over longer timeframes. Finally, research could consider what the industry view as the influence of the PDP on students. Research in terms of other influences of the PDP has been reported elsewhere by the authors (Freudenberg et al., 2008).
Conclusion

In response to the educational/practice gap vis-à-vis the ‘employment readiness’ of students, the PDP was designed to systematically expose commencing students in a commerce undergraduate degree to industry and professional body representatives in an attempt to develop their professional identity, skills and awareness. This paper describes the PDP and reports on preliminary evidence of its impact on student participants. Overall, we conclude that the initial stages of the PDP project have been successful in developing the professional skills and awareness of students. Indeed, significant impacts on student confidence and professional identity are demonstrated. Perhaps most important is the evidence that a WIL integrated approach with a focus on professional awareness and identity will mitigate the risk of students falling into an ‘uncongenial calling’.

The evidence suggests that WIL models may be useful in responding to the educational/practice gap and hence universities should consider further investment in such initiatives. Furthermore, the approach suggests that an integrated model will produce significant outcomes for all stakeholders.

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